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ABSTRACT

The principal justification for the federal government's long-term and substantial support of vocational education programs is the need to provide opportunities for American workers, particularly those without marketable skills from lower income and minority families, to develop job-related skills. In recent decades, Congress has enacted several laws aimed at eliminating race and sex stereotyping in vocational education institutions. Based on an examination of the enrollment patterns at Milwaukee Area Technical College (MATC), it would appear that MATC perpetuates racial and sex stereotypes historically associated with vocational education in the United States, since females and minority group members studying there are concentrated in educational programs whose graduates earn salaries that are below the average salaries generally earned by MATC graduates. Therefore, MATC officials should reexamine their efforts to eliminate sex and racial stereotypes and to open up opportunities previously denied to students because of their sex or race. Particularly needed are negotiations with state officials and employers to develop an affirmative action plan that would expand opportunities for racial minority group members and women in apprenticeship training programs conducted at the school. Furthermore, MATC officials should develop a system to monitor their progress in eliminating bias in their program and should seek the funds necessary to support their American Indian and bilingual programs. (MN)

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Vocational Education: Where Are the Minorities and Women?

March 1983

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Vocational Education: Where Are the Minorities and Women?

March 1983

-- A Statement prepared by the Wisconsin Advisory Committee to the U.S. Commission on Civil Rights

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The findings and recommendations contained in this statement are those of the Wisconsin Advisory Committee to the United States Commission on Civil Rights and, as such, are not attributable to the Commission. This statement has been prepared by the State Advisory Committee for submission to the Commission and will be considered by the Commission in formulating its recommendations to the President and Congress.

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LETTER OF TRANSMITTAL

Wisconsin Advisory Committee
U.S. Commission on Civil Rights
March 1983

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John Hope III, Acting Staff Director

Dear Commissioners:

The Wisconsin Advisory Committee submits this statement on vocational education in the Milwaukee area as a part of its responsibility to advise the Commission about civil rights problems within this state.

In this report the Committee reviews the history of vocational education in the United States particularly as its has affected minorities and women. The focus of this investigation is a statistical analysis in which the race and sex composition of selected academic programs at the Milwaukee Area Technical College (MATC) is compared with the average income of graduates of these programs to determine whether minorities and women are concentrated in programs that lead to lower paying jobs.

The Committee found that women enrolled in daytime and evening programs and racial minorities enrolled in evening programs at the MATC are concentrated in educational programs whose graduates earn salaries below the average of all MATC students generally. The MATC programs thus perpetuate racial and sexual stereotypes historically associated with vocational education in the United States.

MATC officials have taken several steps in efforts to create greater opportunity for racial minorities and women. For example, the "Crossover Programs" were created to help students overcome academic deficiencies. However, faculty members reported that the program was ineffective and that the level of services compared to demands were inadequate.

The Committee also found that apprenticeship training programs conducted at the MATC are made up primarily of white male students. MATC, however, does not select the participants. Participants are selected by the Wisconsin State Department of Industry and Human Relations, Division of Apprenticeship and Training, and prospective employers.

The Committee found that programs geared for American Indians and bilingual programs did not provide sufficient services for the number of students who could benefit from those programs. Administrators of the programs charged that MATC officials were not committed to the programs, noting that the programs were supported primarily with Federal dollars. They were fearful that reductions of Federal funds would lead to elimination of the programs.

Based on these findings the Committee recommends that MATC officials re-examine all efforts taken to eliminate sexual and racial discrimination and to open up opportunities previously denied many students because of their sex and race. MATC officials should work with teachers, students and other MATC personnel to take whatever actions are necessary to eliminate the causes of sex and race discrimination in the programs. That effort should include a system for monitoring their progress in eliminating sex and race bias in their educational programs. That monitoring effort should also include an annual result-oriented analysis of the race and sex composition of each program offered at MATC and the benefits received by program graduates.

The Committee also recommends that MATC officials seek local as well as Federal funds to adequately support American Indian and bilingual programs and assure the continuation of these programs with local funds if Federal support is withdrawn.

Although the Committee requests no specific Commission action, the statement is transmitted in the interest of advising you of the civil rights developments that affect women and minorities in Wisconsin. We hope you concur with this report and support the Committee in its follow-up efforts.

Respectfully,

Herbert Hill, Chairperson
Wisconsin Advisory Committee

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Chapter 1

INTRODUCTION

The Federal government has long been involved in the support of educational programs at the state and local levels. No category of education has been more heavily subsidized by Federal money or infused with state involvement than vocational education.[1]

Vocational education was designed to prepare persons at the secondary and postsecondary level for employment in the 80 percent of this country's occupations that require technical training.[2] Many criticisms have been directed toward vocational education. The major criticisms are that vocational education does not do what it was designed to do and that many youngsters are not receiving the benefits of the training programs.

Despite substantial criticism over the years, Congress has tended to authorize and renew funding for vocational education automatically.[3] There has been little evaluation of the impact of the program. With the 1976 Vocational Education Act Amendments, Congress began to require substantial evaluation and accountability on the part of educators and administrators to assure that stated objectives were met.

The Vocational Education Act Amendments of 1976 provide for the following changes:

- -the planning and accountability process must allow for public input.
- -sex bias and stereotyping must be eliminated and equal educational opportunities in vocational training must be afforded persons of both sexes.
- -funding must be directed to economically depressed areas and communities with high unemployment.
- -vocational education training must provide skills for available jobs in the current labor market rather than skills that are obsolete.[4]

The case of Adams V. Califano,[5] in which the U.S. Department of Health, Education, and Welfare was sued for failure to meet its civil rights enforcement responsibilities and recent research indicating race and sex bias in vocational education[6] reveal that equal opportunity is not yet a reality. In light of these findings, the growing importance of vocational education, and expanded Federal involvement, the Wisconsin Advisory Committee to the U.S. Commission on Civil Rights examined vocational education in the Milwaukee metropolitan area.

Specifically, the study focused on the kinds of jobs students of the Milwaukee Area Technical College (MATC) obtained upon completion of their training.

In this statement the Committee reviews the history of vocational education in the United States particularly as it has affected minorities and women. Data on race and sex enrollment patterns of MATC students and on job placement of MATC graduates are analyzed along with information obtained in interviews with MATC faculty and administrators. This statement concludes with the Committees' findings and recommendations.

Chapter 2

VOCATIONAL EDUCATION AND EQUAL OPPORTUNITY

Legislative History

During the late 19th and early 20th Centuries the United States experienced substantial industrial growth accompanied by migration of people, many of whom were poor and uneducated, to the urban centers of the nation. The changing demands of the labor market and problems of unemployment created strong support for vocational education as a part of the educational system.

The Smith-Hughes Act providing Federal aid to vocational education was passed in 1917 primarily to prepare the migrants to urban areas, the potential labor force of this country, for the jobs created by industrialization.[7] The Smith-Hughes Act was approved primarily because of the strong lobbying effort of business, agriculture, educators and labor through the National Society for the Promotion of Industrial Education.[8]

Under Smith-Hughes a Federal Vocational Board was established to impose standards and regulations on the states. Each state was authorized to establish a Board of Vocational Education to administer Federal funds. Funds were allocated to the states based on their population and were distributed in separate allocations for agricultural,

home economic, and industrial subjects. In 1933, administering authority was transferred from the Federal Vocational Board to the Office of Education.[9]

Congress expanded the scope and funding of vocational education three times between World War I and World War II. The District of Columbia, Alaska, and U.S. Territories were included for the first time during this period and training was extended to include such occupations as marketing, nursing, and fishing.

The high level of unemployment among youth and minorities motivated passage of the Vocational Education Act of 1963.[10] This Act marked the first time that the Federal government recognized the special needs of some students who were prevented from succeeding in regular programs because of academic, social, and other handicaps.[11] For the first time, funds were allocated for various auxiliary services, research, and work study programs and for the construction and operation of residential vocational schools.[12] The 1968 amendments to the Vocational Education Act of 1963 reinforced the Federal commitment of aid to students with "special needs".

However, it was not until the Vocational Education Act Amendment of 1976 that Congress enacted significant legislation to eliminate the pervasive sex discrimination in vocational education.[13] As indicated above, this

amendment included a number of mandatory provisions for eliminating sex bias and sex stereotyping in all federally assisted vocational programs.[14] It also required state initiatives to meet emerging personpower needs in employment and mandated each state to distribute funds to economically depressed areas with high unemployment rates. In addition, it required each state to conduct public hearings during the development of and prior to the adoption of the required five-year plan to be submitted to the Office of Education for funding.[15]

Inequality in Vocational Education

Since its inception, vocational education has occupied a significant position among Federal education programs. Between the enactment of the Vocational Education Acts of 1963 and 1974, over three billion dollars were spent on vocational education[16] with annual expenditures reaching $570 million dollars in 1977.[17]

Serious questions have been raised regarding the distribution of funds by the states. Analyzing the distribution of funds is complicated by the flexibility of the distribution criteria. Each state has its own method of allocating funds to districts.[18] Phyllis McClure in her paper, entitled "Race and Sex Compliance Issues in Vocational Education," charged that the distribution of

Federal vocation funds was inequitable.[19] McClure pointed out that since the 1960's the Federal government has subsidized vocational education programs which have limited access of blacks to the full range of available training opportunities. She explained that the many barriers are manifested in the following ways:

- location of schools - the location of newer and more modern facilities outside urban areas;
- the existence of segregated school districts in Northern and Southern states having separate attendance zones and separate branches offering different programs.
- admission criteria - a host of admission criteria confronts the student, especially in the better programs for which he or she was inadequately prepared by his or her former education.

All of these factors have limited access to vocational education for minorities and women.[20]

A 1972 report, prepared by the Comptroller General of the United States, charged that funds intended for particular beneficiaries needing vocational education services were not reaching them.[21] Some states had not spent any state or Federal funds over a three-year period for the disadvantaged or handicapped although they were

still receiving Federal assistance.[22] Minorities were not getting into programs that would provide them equal opportunities on entering the labor market. None of the vocational programs reviewed in the Comptroller's report had helped minorities overcome the barriers of class and income.[23] While there has been an increase of 60 percent in the female labor force between 1950 and 1976, women remain concentrated in traditional occupations. Critics point out that vocational education has had little impact in changing these inequities in the labor force.[24]

Enforcement

Major changes in vocational education legislation itself have occurred in the past two decades with the 1963, 1968, and 1976 Acts. One significant change has been the incorporation of further protection for minorities and women. In addition, both Title VI of the Civil Rights Act of 1964 (prohibiting discrimination in programs receiving Federal financial assistance) and Title IX of the Education Amendments Act of 1972 (prohibiting sex discrimination in vocational institutions) have had far reaching effects on the elimination of sex and race discrimination in vocational schools. However, for several years the Office for Civil Rights (OCR) of the Department of Health, Education and Welfare (HEW) which had enforcement authority

under both laws was not enforcing them with respect to vocational education schools. This lack of activity led to litigation against HEW in which plaintiffs demanded that it enforce both statutes in accordance with law.[25] In Adams v. Califano,[26] the U.S. District Court for the District of Columbia in 1973 ordered OCR to conduct on-site reviews to assure that districts were complying with Title VI. OCR subsequently conducted surveys of about 1,500 area vocational schools and found 67 school districts in violation of the non-discrimination requirements of Federal law.[27] After the initial survey, the plaintiffs challenged the good faith of OCR's efforts to enforce the statutes as ordered by the court. This action resulted in a consent decree in which OCR agreed to conduct a specified number of on-site compliance reviews to assess the extent of compliance of vocational schools with the law.

The Federal government's commitment to vocational education can be seen in the number of laws pertaining to vocational education and the amount of money appropriated for the programs. However, studies have shown that even with the laws and the financial commitment, vocational education has not made the impact which it was designed to make. A vigorous enforcement effort by OCR could reveal to what extent the failure of vocational schools to meet the

government's goals of providing the poor and unemployed with marketable job skills results from their non-compliance with civil rights laws.

Chapter 3

EQUAL OPPORTUNITY IN THE MILWAUKEE AREA TECHNICAL COLLEGE

Wisconsin's population is concentrated in the southern section of the state. Although Wisconsin is famous for its dairy products, most of the state's jobs, its people, and particularly its minority population are located in the southeastern industrial corridor.[28]

Originally the state of Wisconsin was populated by people of European extraction. Today, however, the population exhibits great ethnic diversity. Milwaukee, which is well known for its large German population, has experienced a substantial increase in its black population in recent decades.[29] According to the 1980 Census the state of Wisconsin has a total population of 4,705,335. Of this 4,442,592 (94.4%) are White, 182,593 (3.9%) are Black, 62,981 (1.3%) are of Spanish origin and 29,497 (1%) are American Indians.[30]

The Milwaukee SMSA, as indicated by 1980 Census, has a total population of 1,397,143. Of this total 1,215,167 (97%) are white, 150,677 (11%) are black, 34,534 (2%) are of Spanish origin, 6,534 (less than 1%) are American Indians, Eskimos or Aleutes, and 7,630 (less than 1%) are Asians or Pacific Islanders.[31]

The Vocational School System in Wisconsin

The Wisconsin Board of Vocational, Technical and Adult Education (VTAE), under the direction of a state director, establishes policy for the 16 designated vocational education districts in the state.[32] The VTAE Board is composed of twelve members and is independent of any other agency in the state. According to a brochure of the Vocational Technical and Adult Education System (VTAE):

> Approximately 57 percent of the total VTAE district revenue is local (property taxes and students fees) 21 percent is from state aids, and 9 percent is provided by the Federal government. Another 13 percent is from a variety of sources.[33]

The VTAE Board has standing committees that cover policy-making responsibilities ranging from finance to educational programs and an executive officer who is responsible for the overall administration of the agency and for recommending policies to the State Board.[34]

The Governor is charged with the responsibility of selecting twenty-seven persons from diverse backgrounds to serve on the advisory council which develops long and short range plans for educational programs in the state. These recommendations are then transmitted to the National Advisory Council on Vocational Education and to the U.S. Commissioner on Education.[35]

The Milwaukee Area Vocational, Technical and Adult Education District

Milwaukee is one of the sixteen vocational education districts. There are four campuses within the Milwaukee Area Vocational and Adult Education District: the Milwaukee Area Technical College (MATC), in Milwaukee; the North Campus Center, in Mequon; the South Campus Center, in Oak Creek; and the West Campus Center, in Allis. The MATC district is administered by a district director and a seven-member board. The board is composed of the following individuals: two employers, two employees, two citizens at large, and an ex-officio public school administrator.[36] These members are elected by school districts within the boundaries of the MATC district.[37]

The majority of the students who attend MATC come from the 21 public schools in the MATC district. Of the total students enrolled at MATC in day and evening classes approximately 60 percent come from the city of Milwaukee.[38]

According to the 1980-81 affirmative action report 23,784 students are enrolled in the Milwaukee district, 68 percent of whom are fulltime students. Of the total, 68 percent are daytime students and 32 percent are evening students. Evening students are generally older averaging 27 or 28 years of age. Many of them have been out of school for several years and are employed.[39] Minority

students are concentrated at the Milwaukee campus. In 1981, of the 10,808 daytime students enrolled at the Milwaukee campus 28.7 percent were black, 3.0 percent were Hispanic, 1.2 percent were American Indian, and 2.1 percent were Asian. Women account for 56 percent of MATC students. Racial minorities account for 35 percent of all MATC students compared to just 7 percent at the three regional campuses. Women account for 51 percent of the MATC students and 68 percent at the other campuses.[40]

Where are the Minorities and Women?

> "If you look in the back..the back four rows are populated with blacks, with one or two sprinkled out in the front, this automatically indicates that something is wrong.[41]

In today's economic conditions one must have marketable skills and be able to compete for the few jobs available. Advocates of vocational education emphasize that young people can be taught the marketable skills necessary to compete in the job market.[42] Yet while huge amounts of money have been spent by the Federal government and the states over the years for vocational education, relatively few students have in fact learned necessary job skills. And as indicated in the previous chapter, there is evidence that services available through vocational education institutions have not been delivered equitably to all races and both sexes. A major concern has been the

concentration of racial minorities and women in training programs that have traditionally been stereotyped by race or sex; i.e., programs leading to lower paid jobs or no jobs at all.

To assess the payoff of vocational education for racial minorities and women, the Wisconsin Advisory Committee examined the race and sex composition of selected academic programs at MATC. The average income of graduates of these programs was then examined to determine whether minorities and women were concentrated in programs whose graduates received salaries that were higher than, lower than, or the same as MATC graduates generally. Data on the race and sex composition of students in the Associate Degree programs[43] in both the daytime and evening programs at MATC for the 1978-79 academic year were obtained from school officials along with income data of graduates of the programs.[44] The income data came from a sample of all graduates who responded to a 1978 questionnaire taken shortly after graduation.[45] The percentages of total graduates who responded to the survey is unknown. Using average salaries of the responding graduates, each program was identified as either "low" or "high". After listing the average salary of graduates in each program, those programs where the average salary was higher than the median were labeled "high" while those programs where the

average salary was lower than the median were labeled "low". The race and sex composition of current students in these programs was used to allocate students by both race and sex to either "high" or "low" programs (see Appendices A-D for the race and sex composition of each program included in the analysis). From this procedure the Committee was able to determine, for example, how many minority women in the evening programs were enrolled in programs that were labeled as "high" or "low" depending on the average income of the graduates of those programs. Chi square analysis (see Appendix E) was utilized to determine whether or not there was a relationship between the average income of programs graduates with either the race or sex composition of students currently enrolled in those programs.

We found that in both the daytime and evening programs female students tend to be concentrated in those academic programs that lead to lower paying jobs, i.e., those programs labeled as "low". (See Tables 1, 2, 5, 6). For example, as illustrated by Table 5, among whites enrolled in daytime programs 52 percent of the males are enrolled in high income programs compared to just 32 percent of the women. The same pattern was found for minorities enrolled in daytime programs as well as for whites and minorities in evening programs. (Tables 1-4, 6).

TABLE 1 Sex of White Students Enrolled in Evening Educational Programs by Income Level of Program Graduates

	White Male	White Female	Total
Low Income	97 (22%)	106 (48%)	203 (31%)
High Income	342 (78%)	116 (52%)	458 (69%)
Total	439 (100%)	222 (100%)	661 (100%)

X^2=46.1 Significant at the .01 level

TABLE 2 Sex of Minority Students Enrolled in Evening Educational Programs by Income Level of Program Graduates

	Minority Male	Minority Female	Total
Low Income	35 (30%)	75 (62%)	110 (46%)
High Income	82 (70%)	46 (38%	128 (54%)
Total	117 (100%)	121 (100%)	238 (100%)

X^2=24.5 Significant at the .01 level

TABLE 3 Race of Women Enrolled in Evening Educational Programs by Income Level of Program Graduates

	White Female	Minority Female	Totals
Low Income	106 (48%)	75 (62%)	181 (53%)
High Income	116 (52%)	46 (38%)	162 (47%)
Totals	222 (100%)	121 (100%)	343 (100%)

$X^2=6.2$ Significant at the .025 level

TABLE 4 Race of Men Enrolled in Evening Educational Programs by Income Level of Program Graduates

	White Male	Minority Male	Totals
Low Income	97 (22%)	35 (30%)	132 (24%)
High Income	342 (78%)	82 (70%)	424 (76%)
Totals	439 (100%)	117 (100%)	556 (100%)

$X^2=3.1$ Significant at .1 level
but not Significant at the .05 level

TABLE 5 Sex of White Students Enrolled in Day Time Educational Programs by Income Level of Program Graduates

	White Male	White Female	Total
Low Income	455 (48%)	528 (68%)	983 (57%)
High Income	487 (52%)	248 (32%)	736 (43%)
Total	942 (100%)	777 (100%)	1719 (100%)

X^2=67.7 Significant at the .01 level

TABLE 6 Sex of Minority Students Enrolled in Day Time Educational Programs by Income Level of Program Graduates

	Minority Male	Minority Female	Total
Low Income	65 (44%)	161 (71%)	226 (60%)
High Income	83 (56%)	67 (29%)	150 (40%)
Total	148 (100%)	228 (100%)	376 (100%)

X^2=26.8 Significant at the .01 level

In the evening program, the Committee found that racial minorities tend to be concentrated in the "low" income programs. For example, among female evening students, 52 percent of the whites are in high income programs compared to 46 percent of the minorities. (See Table 3).

The racial effect of race in the evening program is most pronounced among women, as indicated by the fact that the chi square statistic comparing white and non-white women is statistically significant ($p<.05$) while that for men oorders on but does not reach conventional standards of statistical significance ($p<.10$). (Tables 5, 6).

There are important differences between the daytime and evening students. Among the evening students there is a relationship between race and academic program, though as indicated previously the relationship is stronger for women ($p<.05$) than for men ($p<.10$). While the relationship between white and non-white men is not statistically significant, white men appear to be slightly overrepresented among "high" programs, which is the opposite of what was found for daytime students. (See Tables 6 and 7). There is no statistically significant relationship between race and academic program among the male or the female daytime students. (See Tables 7 and 8).

TABLE 7 Race of Men Enrolled in Daytime Educational Programs by Income Level of Program Graduates

	White Male	Minority Male	Totals
Low Income	455 (48%)	65 (44%)	520 (48%)
High Income	487 (52%)	83 (56%)	570 (52%)
Totals	942 (100%)	148 (100%)	1090 (100%)

$X^2=1.2$ Not Significant at the .1 level

TABLE 8 Race of Women Enrolled in Daytime Educational Programs by Income Level of Program Graduates

	White Female	Minority Female	Totals
Low Income	528 (68%)	161 (71%)	689 (69%)
High Income	249 (32%)	67 (29%)	316 (31%)
Totals	777 (100%)	228 (100%)	1005 (100%)

$X^2=.8$ Not Significant at the .1 level

This analysis did not include apprenticeship programs conducted at MATC, primarily because MATC has no official role in selecting these students. MATC, like many other vocational schools, provides classroom instruction and equipment but has nothing to do with the selection of the students in the programs. Research studies of apprenticeship programs in vocational schools indicated that the programs are largely dominated by white males.[46] Reports have also pointed out that Blacks and women have been excluded from building craft unions.[47] If these programs had been included it is probable that most of them would have been included in the higher paying job categories.[48]

In accord with the laws governing apprenticeships programs in Wisconsin, the MATC was given authority to cooperate with employers and the Division of Apprenticeship and Training, Department of Industry, Labor and Human Relations (DILHR) to provide instruction for those students who are under apprenticeship contract.[49] Student placement is the direct result of contractual agreements between the apprentices and employers. The DILHR Apprenticeship Division draws up the standards for their training.[50]

According to 1978 enrollment data, most of the apprentices attended MATC during the evening. Minorities were poorly represented in the apprenticeship classes. Only

two students in apprenticeship programs were attending daytime classes compared to 984 in evening programs in all four Milwaukee district campuses. Of these students, 56 percent were white and five percent minority with the remainder classified as "unidentified." In response, the Committee's request for a definition of "unidentified," MATC officials stated they are students who chose not to designate their ethnicity on the survey form when they apply.[51]

Women and racial minorities at MATC are concentrated in those educational programs that do not have the same high income prospects as those in which white males are concentrated. The effect of the MATC program is to perpetuate the sexual stereotypes and to a lesser extent racial stereotypes long associated with vocational education in the United States.

Response of MATC Officials

When administrators and faculty at MATC were asked why women and minorities tended to be concentrated in academic programs that lead to lower paying jobs, they pointed to inadequacies in preparation at the high school level.[52] Most said these students did not have the mathematics background and other academic qualifications required for academic

programs leading to the higher paid technical positions.[53] Tracking and generally poor service by high school counselors were mentioned by several on the faculty. Administrators and faculty also suggest that students choose their own courses and their selections are conditioned by traditional race and sex stereotypes.[54]

Testing also appears to be a factor in the overrepresentation of women and minorities in "low" income programs. According to Dr. Marvin Ketterling, Director of the Psychological, Vocational Testing and Counseling Center, an estimated 800 out of approximately 5-6,000 day students take tests designed to help them select a career choice or level at which they should enroll.[55] Ketterling reported that sex bias has been eliminated from the tests used by the school. He acknowledged, however, that biases favoring middle class (generally white) students remain in most of the tests,[56] despite the fact that MATC officials and the originators of the tests constantly review them for the purpose of eliminating such bias.[57] He also noted that most of the counseling and testing of students is conducted during the day time classes,[58] though some services are available to evening students as well.[59]

MATC has taken several steps to increase and improve its services to racial minorities and women. For example, the school has targeted radio, television and newspaper

advertisements to minority communities. Brochures are disseminated throughout the community. Career days and open houses are conducted. A career van is utilized as an additional vehicle for advertising MATC programs.[60] But according to David Russell, a counselor in the Business Division, these efforts were taken primarily to produce more students so that MATC could justify and increase its funding.[61] John J. Deady, Dean of Student Services, however, challenged this assertion. He stated that "MATC has had a long and outstanding record relating to serving the minority community." Deady cited the "wide variety of programs" available to "all who desire to enroll," as just part of the evidence supporting MATC's response to the needs of the disadvantaged.[62]

The Crossover Program represents another effort directed at educationally disadvantaged students. Most of the academic programs offered at MATC have specific academic requirements. If a student does not meet the requirements for a particular program he or she is advised to make up deficiencies by entering a Crossover Program. According to Deady, "The Crossover Program has earned the respect of MATC faculty and staff and the respect by the community for helping students."[63] Others disagree. Some

of the faculty stated that some minority students are mislabeled and placed in Crossover Programs when they should have been assigned to regular course work.[64]

There are two specific programs offered by MATC designed to help Hispanics and American Indians. Both programs have been in existence for approximately nine years and have been financed with Federal funds. These programs offer a variety of services including: recruitment, advising, career guidance, retention assistance, liaison with the community, and referrals to other agencies.

The Hispanic Program staff indicated that the program is not large enough given the size and continuing growth of the Hispanic community. The school has not responded to the need for bilingual vocational education programs.[65] According to Oscar Cervera, Spanish American Specialist, existence of the present program is an indication that the MATC administration is trying to address the vocational education needs of the Hispanic community but efforts are not adequate.[66] Cervera accounted for the concentration of evening minority students in lower paid programs to the absence of special services for evening students. In particular he noted that counselors are unable to evaluate Spanish speaking students because of the language barrier and that most Hispanic students and parents lack

familiarity with the diverse programs offered by MATC, thus adversely affecting their selection ability.[67] According to Deady, however, a bilingual recruiter and bilingual specialist are available to provide necessary assistance and no complaints have come from the community regarding these services.[68]

The MATC faculty's insensitivity was cited as a problem with respect to American Indians. According to Sherwin Davids of the Native American Program, the passive nature of some of the American Indian students is often mistaken for inability to learn and consequently they are unfairly downgraded. He claims many of the American Indian students are mislabeled and placed in Crossover Programs when they should be in regular programs.[69] Davids expressed concern over the commitment of the MATC administration to programs for Hispanics and Native Americans because they are supported primarily with Federal funds and no local funds are committed to them.

Women and minorities at MATC are concentrated in those programs that lead to lower than median salaries for MATC graduates generally. According to several members of MATC staff, efforts have been made to increase opportunities for women and minorities, but these efforts have been inadequate. The payoff for vocational education provided at MATC remains greater for white males than racial

minorities or women. The MATC program has served to perpetuate the sexual and racial stereotypes that recent Federal legislation has attempted to eradicate from the nation's vocational education institutions.

Chapter 4

FINDINGS AND RECOMMENDATIONS

FINDINGS

1. The Federal government commits substantial resources to vocational education programs. The principal justification for this long term support is the need to provide opportunities for American workers, particularly those without marketable skills from lower income and minority families, to develop job-related skills.

2. In recent decades, Congress has enacted several laws aimed at eliminating race and sex stereotyping in vocational education institutions.

3. Women enrolled in daytime and evening programs and racial minorities enrolled in evening programs at the Milwaukee Area Technical College (MATC) are concentrated in educational programs whose graduates earn salaries below the average of all MATC students generally. The MATC program thus perpetuates racial and sexual stereotypes historically associated with vocational education in the United States.

4. Apprenticeship training programs conducted at the MATC are made up primarily of white male students. MATC, however, does not select the participants. Participants are selected by the Department of Industry and Human Relations, Division of Apprenticeship and Training, and prospective employers.

5. According to MATC administrators and faculty, student enrollment patterns result from several factors including: inadequate training and poor counseling at the high school level; bias in MATC testing procedures; and insensitivity on the part of some MATC personnel.

6. MATC officials have taken several steps in efforts to eliminate sex and race stereotyping and to create greater opportunities for racial minorities and women including: targeting of publicity to the minority community; creation of "Crossover Programs" to help students overcome academic deficiencies; and development of programs to meet the particular needs of Hispanic and American Indian students.

7. The efforts of MATC to eradicate sexually and racially discriminatory enrollment patterns have been ineffective. Among the problems cited are: deficiencies in the quality of the Crossover Programs;

inadequate level of services compared to the demands; unavailability of some counseling services for evening students; and lack of commitment by MATC officials as evidenced by a reliance on Federal dollars to support existing services with a few local dollars spent for these purposes.

8. MATC officials provided data indicating that Crossover Program student dropouts had decreased and that the successful completion rate had increased. However MATC faculty reported that some students, particularly minority students, who did not need to be in the program were placed in them. As a result, many became frustrated and dropped out because of their lack of progress.

9. Funding for the American Indian and bilingual programs is inadequate to provide sufficient services for the number of students who could benefit from these programs. Because these services are supported entirely with Federal funds, program administrators are fearful that reductions in Federal support would lead to the elimination of the programs.

RECOMMENDATIONS

1. MATC officials should re-examine all efforts taken to eliminate sexual and racial stereotyping and to open up opportunities previously denied many students because of their sex or race. They should work with teachers, students, and other MATC personnel to take whatever actions are necessary to eliminate the causes of sex and race discrimination in the programs. The focus of these efforts should be the effects of the program, not the intent of MATC officials or other personnel.

2. MATC should initiate negotiations with the Division of Apprenticeship and Training of the Wisconsin Department of Industry, Labor and Human Relations and relevant employers to develop an affirmative action plan that will open up opportunities for racial minorities and women in those apprenticeship training programs conducted at the school.

3. MATC officials should develop a system for monitoring their progress in eliminating sex and race bias in their educational program. That monitoring effort should include an annual result oriented analysis of the race and sex composition of each educational program offered at MATC and the benefits received by program graduates.

Those benefits include salary, availability of jobs in areas for which students have been trained, and other prerequisites of employment.

4. MATC officials should identify the barriers many minority students face in their efforts to progress through the Crossover Program and take whatever steps are necessary to eliminate those barriers.

5. MATC officials should seek the funds necessary to adequately support the American Indian and bilingual programs. Local as well as Federal funds should be committed to assure continuation of the program if the Federal support is withdrawn.

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[1]Title VI and Title IX Compliance by the Office For Civil Rights in the State-Operated Special Purpose and Vocational Schools Pursuant to Adams v. Mathews, by Phyllis McClure, NAACP Legal Defense and Educational Fund, Inc., July, 1976. (hereafter cited as McClure Report).

[2]U.S. General Accounting Office. What is the Role of Federal Assistance for Vocational Education? Report of the Comptroller General to Congress. (Washington, D.C.: U.S. Government Printing Office, 1974) (hereafter cited as GAO Report).

[3]"U.S. Study Assails Vocational Courses", Gene I. Maeroff, New York Times, Oct. 16, 1979 (hereafter cited as Maeroff Article).

[4]U.S. Government Memorandum from Louis Nunez (Acting Staff Director for the United States Commission on Civil Rights) to the Commissioners of the U.S. Commission on Civil Rights, August 28, 1978.

[5]Adams v. Califano, No. 3095-70 (D.D.C., Dec. 29, 1977).

[6]GAO Report.

[7]"The Vocational Education Study: The Interim Report, Publication No. 3 Chapter II U.S. Department of Health, Education, and Welfare, Washington, D.C., September, 1980 (hereafter cited as Vocation Education Study).

[8]Ibid, Chapter II-3

[9]Ibid

[10]The Planning Papers for Vocational Education Study Publication 1, Race and Sex Issues in Vocational Education, Phyllis McClure, U.S. Department of Health, Education and Welfare, Washington, D.C. April, 1979, (hereafter cited as The Planning Papers - McClure).

[11]Ibid p. 284

[12]Ibid

[13]Ibid

[14]Ibid

[15]Ibid

[16]Nunez Memo.

[17]The Planning Papers, McClure p. 24.

[18]Ibid, p. 26

[19]Ibid p. 283

[20]Ibid. p. 298, 290, 292.

[21]GAO Report

[22]Ibid.

[23]The Planning Papers For Vocational Education Study, Publication No. 1, Vocational Education for Special Needs Students, Phyllis Hamilton, U.S. Department of Health, Education and Welfare, Washington, D.C. September, 1980 (hereafter cited as The Planning Papers-Hamilton).

[24]Ibid.

[25]The Planning Papers-McClure, p. 286.

[26]Adams v. Califano, No. 3095-70 (D.D.C., Dec. 29, 1977).
[27]Ibid.
[28]"An Assessment of Vocational Education in Wisconsin-1976," Marion E. Franken and Joan Earnhart, Wisconsin Advisory Council on Vocational Education, 1976, p. 7 (hereafter cited as Wisconsin Voc. Ed. Advisory Council Report).
[29]Ibid p. 8
[30]U.S. Bureau of the Census, Department of Commerce, 1980 Advance Report PHC 80-V-51.
[31]Supplementary Report PC 80-S1-5, Standard Metropolitan Statistical Area and Standard Consolidated Statistical Areas, 1980. Issued by U.S. Department of Commerce, Bureau of Census.
[32]Vocational Technical and Adult Education-Wisconsin Style - brochure produced by the Public Information Department Western Wisconsin Technical Institute-La Crosse.
[33]Ibid.
[34]Ibid.
[35]Ibid.
[36]Milwaukee, Wisconsin Vocational Education Study, response to questionnaire submitted to William L. Ramsey, by the MWRO of the U.S. Commission on Civil Rights, Nov. 8, 1980 (hereafter cited as Response Questionnaire).
[37]Ibid.
[38]Ibid.
[39]Ibid.
[40]Ibid.
[41]Stanley Nawrocki, Teacher, Technical and Industrial Division, Milwaukee Area Technical College, interview in Milwaukee Wisconsin, July 9, 1980.
[42]Maeroff Article.
[43]Response to questionnaire (Computer print-out of student enrollment by code and MATC Placement Newsletter, Salary Series, Associate Degree Programs: February, 1978).
[44]Ibid.
[45]Ibid.
[46]The Planning Paper, McClure, p. 299.
[47]Herbert Hill, "The AFL-CIO and the Black Worker: Twenty-Five Years After the Merger, The Journal of Intergroup Relations, 1982.
[48]The Planning Papers-McClure.
[49]Response to Questionnaire.
[50]Response to Questionnaire.
[51]Milwaukee Area Technical College, faculty and administration interviews, July 8, 9, 1980. Interviews were arranged by John J. Deady, Dean of Student Services (hereafter cited as MATC interviews).
[52]Response to Questionnaire.
[53]MATC interviews.
[54]MATC interviews.

[55]Marvin Ketterling, Psychological and Vocational Testing and Counseling, Milwaukeke Area Technical College interviews, July 8-9, 1980. (hereafter cited as Ketterling interview)
[56]Ketterling interview.
[57]John J. Deady, Dean of Student Services, letter to Clark G. Roberts, Regional Director, Midwestern Regional Office, U.S. Commission on Civil Rights, Nov. 9, 1982 (hereafter cited as Deady letter).
[58]Ketterling interview.
[59]Deady letter.
[60]MATC interviews. Deady letter.
[61]David Russell, Counselor, Business Division, Milwaukee Area Technical College interviews, July 8, 9, 1980. (hereafter cited as the Russell interview).
[62]Deady letter.
[63]Ibid.
[64]Oscar Cervera, Spanish American Specialist, Milwaukee Area Technical College, interview, July 30, 1980 (hereafter cited as Cervera interview).
[65]Cervera interview.
[66]Cervera interview.
[67]Cervera interview.
[68]Deady letter.
[69]Sherwin Davids, Native American Specialist, Milwaukee Area Technical College, interview, July 30, 1980.

APPENDICES

APPENDIX A

1978-79
Evening - Part Time
Milwaukee Area Technical College
(Low Income Categories)

Majors Careers	Average Salary	Minority			White			Total		
		M	F	T	M	F	T	M	F	GT
Child Care & Development	$ 535		2	2		4	4		6	6
Fashion Merchandising	636	1	5	6	1	4	5	2	9	11
Marketing Retail Mgt.	646	1	1	2	3	3	6	4	4	8
Public Works	649		1	1	2	1	3	2	2	4
Commercial Art	659	5	1	6	12	10	22	17	11	28
Chemical Tech.	682				1		1	1		1
Occupational Th. Ass.	683									
Legal Secretarial	692		6	6		4	4		10	10
Dental Lab Tech.	697					1	1		1	1
Printing & Pub. Adm.	698				3		3	3		3
Medical Secretarial	702		1	1		1	1		2	2
Restaurant & Hotel Cookery	713	1		1	1		1	2		2
Adm. Secretarial	720	1	16	17		17	17	1	33	34
School Service Asso.	728	2	6	8	2	10	12	4	16	20
Printing & Pub. Operation	746	1	1	2	8	3	11	9	4	13
Marketing Management	747	2	1	3	13	6	19	15	7	22
Medical Lab Tech.	760									
Air Cond. & Refrig. Tech.	778				1		1	1		1
Accounting	796	8	13	21	9	8	17	17	21	38
Bus. Adm. Real Estate	800									
Community Service Aide	822	3	15	18	6	10	16	9	25	34
Funeral Service	823									
Physical Therapist	831					1	1		1	1
Visual Communication	857		3	3	3	1	4	3	4	7
Respiratory Therapy	890		1	1		1	1		2	2
Environmental Health Tech.	897	1		1	3		3	4		4
Photography	899	9	2	11	29	21	50	38	23	61
Total		35	75	110	97	106	203	132	181	313

APPENDIX B

1978-79
Evening - Part Time
Milwaukee Area Technical College
(High Income Categories)

Majors Careers	Average Salary	Minority M	Minority F	Minority T	White M	White F	White T	Total M	Total F	Total GT
Police Science	$ 908	8	2	10	29	6	35	37	8	45
Architectural Tech.	913	4	1	5	11	2	13	15	3	18
Communication	957	2		2	4	1	5	6	1	7
Electromechanical Tech.	1000									
Photo Inst. Tech.	1021				3		3	3		3
Ass. Degree Nursing	1035		2	2	1	8	9	3	8	11
Computer	1037		1	1	9	1	10	10	1	11
Business Data Processing	1043	17	12	29	59	55	114	76	67	143
Bus. Adm. Management	1045	10	5	15	33	9	42	43	14	57
Mechanical Eng.	1055				14		14	14		14
Mechanical Design Tech.	1079	4		4	20	1	21	24	1	25
Construction Eng. Tech.	1083				1		1	1		1
Structural Tech.	1088				3	1	4	3	1	4
Biomedical Electronic.	1094	2		2	4		4	6		6
Metalurgical Tech.	1100	2	1	3	14		14	16	1	17
Instrumentation	1131	3		3	9		9	12		12
Welding Tech.	1138				1		1	1		1
Electrical Industrial Tech.	1169	6	2	8	20		20	26	2	28
Business Adm. Finance	1199	3	6	9	9	8	17	12	14	26
Fire Technology	1200				10		10	10		10
Dental Hygiene	1224					1	1		1	1
Industrial Eng. Tech.	1250	1		1	10		10	11		11
Fluid Power Tech.	1324				6		6	6		6
Tech. Eng. Electrical	1379	4	1	5	21		21	25	1	26
Industrial Eng.	1415	1		1	10		10	11		11
Marketing Trans. & Traffic	1499		1	1	9	2	11	9	3	12
Bus. Adm. Gen. Business	1585	15	12	27	32	21	53	47	33	80
Total		82	46	128	342	116	458	427	159	586

APPENDIX C

1978-79
Daytime - Full Time
Milwaukee Area Technical College
(Low Income Categories)

Majors Careers	Average Salary	Minority			White			Total		
		M	F	T	M	F	T	M	F	GT
Child Care & Development	$ 535		6	6		33	33		39	39
Fashion Merchandising	636	3	12	15	2	44	46	5	56	61
Marketing Retail Mgt.	646	2	4	6	12	6	18	14	10	24
Public Works	649	1		1	12		12	13		13
Commercial Art	659	8	4	12	68	75	143	76	79	155
Chemical Tech.	682	2	2	4	7	14	21	9	16	25
Occupational Th. Ass.	683		1	1		28	28		29	29
Legal Secretarial	692	1	11	12		36	36	1	47	48
Dental Lab Tech.	697		1	1	8	11	19	8	12	20
Printing & Pub. Adm.	698	1		1	20	3	23	21	3	24
Medical Secretarial	702		9	9		25	25		34	34
Restaurant & Hotel Cooking	713	8	5	13	79	22	101	87	27	114
Adm. Secretarial	720		24	24		26	26		50	50
School Ser. Ass.	728		5	5	2	7	9	2	12	14
Printing & Pub. Operation	746	2	1	3	42	12	54	44	13	57
Marketing Management	747	10	1	11	19	4	23	29	5	34
Medical Lab Tech.	760				3	26	29	3	26	29
Air Cond. & Refrig. Tech.	778									
Accounting	796	10	25	35	36	49	85	46	74	120
Business Adm. Real Estate	800									
Community Service Aide	822	5	37	42	14	23	37	19	60	79
Funeral Service	823	2	1	3	44	4	48	46	5	51
Physical Therapist	831	1	3	4		14	14	1	17	18
Visual Communication	857	3	6	9	17	11	28	20	17	37
Respiratory Therapy	890	1	1	2	8	23	31	9	24	33
Environmental Health Tech.	897	1		1	3	1	4	4	1	5
Photography	899	4	2	6	59	31	90	63	33	96
Total		65	161	226	455	528	983	520	689	1209

APPENDIX D

1978-79
Daytime - Full Time
Milwaukee Area Technical College
(High Income Categories)

Majors Careers	Average Salary	Minority M	Minority F	Minority T	White M	White F	White T	Total M	Total F	Total GT
Police Science	$ 908	9	1	10	30	12	42	39	13	52
Architectural Tech.	913	1	2	3	34	4	38	35	6	41
Communication	957	8	3	11	56	3	59	64	6	70
Electromechanical Tech.	1000				6		6	6		6
Photo Inst. Tech.	1021				14	3	17	14	3	17
Asso. Degree Nsg.	1035		19	19	13	112	125	13	131	144
Computer	1037	7	1	8	42	5	47	49	6	55
Business Data Processing	1043	13	16	29	53	44	97	66	60	126
Business Adm. Management	1045	14	13	27	29	10	39	43	23	66
Mechanical Eng.	1055									
Mechanical Design Tech.	1079	8		8	33	1	34	41	1	42
Combustion Eng. Tech.	1083									
Structural Tech.	1088	5		5	14	1	15	19	1	20
Biomedical Electronics	1094	3		3	28		28	31		31
Metalurgical Tech.	1100	1		1	13		13	14		14
Instrumentation	1131	1		1	12		12	13		13
Welding Tech.	1138	1		1	10		10	11		11
Electrical Industrial Tech.	1169	3		3	43	1	44	46	1	47
Business Adm. Finance	1199	1	8	9	4	9	13	5	17	22
Fire Technology	1200	4		4	35	1	36	39	1	40
Dental Hygiene	1224					37	37		37	37
Industrial Eng. Tech.	1250									
Fluid Power Tech.	1324									
Tech. Eng. Electrical	1379									
Industrial Eng.	1415									
Marketing Trans. Traffic	1499	1		1	10	1	11	11	1	12
Business Adm. Gen. Business	1585	3	4	7	8	5	13	11	9	20
Total		83	67	150	487	249	736	570	316	886

APPENDIX E

Chi-Square

Chi-square analysis is a statistical test that is utilized to determine whether or not there is a relationship between two variables. The chi-square statistic (which in Table 1 is 46.1-X^2=46.1) is calculated and then located on a standard table of chi-square statistics to determine whether or not the relationship is statistically significant. If the relationship is significant, this means that it is not likely to be a random or chance occurance. In Table 1, for example, the relationship between income and sex proved to be significant, in this case at the .01 level. Generally, the relationship is considered to be statistically significant if, according to the chi-square statistic, that relationship is significant at the .05 level or less: For further information on chi-square analysis see: Gottfried Noether, Introduction to Statistics: A Fresh Approach (Boston: Houghton-Mifflin Company, 1971), or any other standard statistics textbook.